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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted
a patent (Rule 4.17(ii)) for the following designations AE,
AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG,
KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD,
SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN,
YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW,
MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT,
BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,
HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG)— as to the applicant's entitlement to claim the priority of the
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BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ,
EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,
LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM,
PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR,
TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, ARIPO patent
(GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
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amendmentsFor two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: HUMAN MAST CELL-EXPRESSED MEMBRANE PROTEINS

(57) Abstract: Mast cell-expressed membrane proteins that are highly expressed in human mast cells and the lungs as compared to brain, heart, kidney, liver, tracheal, and similar tissues. The proteins are transmembrane proteins involved in the regulation of mast cell and lung tissue function, including degranulation of mast cells. The preferred protein is a 187 amino acid transmembrane protein having an intercellular domain comprising amino acids 1 through 82, a transmembrane domain comprising amino acids 83 through 105, and an extracellular domain comprising amino acids 106 through 187 (SEQ ID NO:2).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/00307

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 39/395, 39/00; G01N 33/53; C12P 21/06, 15/00; C07H 21/04; C12N 15/00
 US CL : 424/194.1, 130.1; 435/ 7.1; 435/69.1, 225.3, 320.1; 536/23.1, 24.5; 800/21

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 424/194.1, 536/23.1,

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9830582 A2 (GENETICS INSTITUTE, INC.) 16 July 1998 (16.07.1998), especially page 56.	1-12 and 33-36
A	US 6,207,876 B1 (KELLEMS et al) 27 March 2001 (27.03.2001), column 73, line 53 bridging column 74.	13-24 and 30-32
X	WILLHEIM et al. Purification of Human Basophils and Mast Cells by Multistep Separation Techniques and mAb to CDw17 and CD117/c-kit J. Immunol. Methods. May 1995, Vol. 182, No. 1, pages 115-129, especially materials and methods.	25-29

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

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- "P" document published prior to the international filing date but later than the priority date claimed

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"X"

document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

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INTERNATIONAL SEARCH REPORT

PCT/US03/00307

Continuation of B. FIELDS SEARCHED Item 3:

PIR_73, SwissProt_40, SPTREMBL_21, Genseq_101002, EMBASE, BIOSIS, SCISEARCH, CAPLUS, MEDLINE on STN